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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/637,130	08/08/2003	Janel Lanphere	01194-465001 / 03-347	3843
26161	7590	05/10/2006	EXAMINER	
FISH & RICHARDSON PC			LE, HOA T	
P.O. BOX 1022			ART UNIT	
MINNEAPOLIS, MN 55440-1022			PAPER NUMBER	

1773

DATE MAILED: 05/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/637,130

Applicant(s)

LANPHERE ET AL.

Examiner

H. T. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-30 and 41-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-30 and 41-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| ↓ Paper No(s)/Mail Date <u>10/03/01&04/04:11/05; 03&05/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Terminal Disclaimer

2. The terminal disclaimer filed on December 14, 2005 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-9, 11-30, and 41-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Smith patent (US 5,888,930).

Claim 1: The Smith patent teaches a spherical bead comprising a polymer having diameter from 5 μm to 5000 μm . See col. 2, lines 46-66. Smith explicitly states that the polymers “useful for preparation of the beads” of Smith invention includes polyvinyl acetate. See col. 2, line 64. Polyvinyl alcohol is a hydrolyzed product of polyvinyl acetate. Thus, if polyvinyl acetate is used as the starting material for the preparation of the beads as taught by Smith, the resulting bead is polyvinyl alcohol. Therefore, the teaching taught by Smith patent encompasses polyvinyl alcohol beads. The pore sizes are very small near the surface to very

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large pores in the interior (col. 2, lines 50-53), which lead to different in pore density between the interior region and the surface region.

Claim 2: The pore sizes are very small near the surface to very large pores in the interior (col. 2, lines 50-53), which means that the pore density in a surface region is greater than that of the interior region.

Claims 3-4: See col. 2, lines 50-53.

Claims 5-8: The claimed diameter range falls within the range taught by the Smith patent at col. 2, lines 46-49.

Claim 9: See col. 2, lines 57-66.

Claims 13-14: The particles are spherical, thus their sphericity must be at least 0.9.

Claims 18-19: The polymers as listed at col. 2, lines 57-66 are insoluble in DMSO and are free of animal-derived compounds.

Claims 20-21: See rejection to claim 1. Larger pores in the interior region would mean that average pore size at the interior region is greater than that at the surface region.

Claims 22 and 30: See examples 20-22 where the particles are mixed in a carrier fluid (a mixture of sticker, surfactant and water).

Claims 25-29 and 54-58: The claimed diameter range falls within the range taught by the Smith patent at col. 2, lines 46-49.

Claim 41: See rejection to claim 1. Larger pores in the interior region would mean that average pore size at the interior region is greater than that at the surface region.

Claims 42-45: The claimed diameter range falls within the range taught by the Smith patent at col. 2, lines 46-49.

Claims 48-51: The claimed diameter range falls within the range taught by the Smith patent at col. 2, lines 46-49.

5. Applicant's arguments with respect to the rejection based on the Smith patent have been considered but are moot in view of the new ground of rejection set forth above.

Response to Arguments

6. **Claims 41-46 are rejected under 35 U.S.C. 102(b) as being anticipated by the Quelle patent (DE 100 26 620) as set forth in the last office action and further discussed below.**

Applicant argues that Quelle teaches porous particles that can have a cavity and a shell which is either porous or non-porous. Thus Applicant concludes that “[w]hile Quelle discloses porous particles, Quelle does not disclose that his porous particles can have two porous regions with different pore densities.” Note that, as explicitly discussed in the last office action, claim 3 of the Quelle patent features a porous article wherein the outer shell is nonporous. Thus, the pore density at the surface of the porous particle is approximately zero. This necessarily requires that the pore density in an interior region of the Quelle particle is greater than the pore density at a surface region.

7. Applicant's arguments with regard to claims 41-46 are not persuasive for the reasons set forth above.


8. Applicant's arguments with respect to the rejection based on the Smith patent have been considered but are moot in view of the new ground of rejection set forth in paragraph 4 above

9. Applicant's arguments with respect to the rejections under 35 U.S.C. 112, first paragraph, have been fully considered and are persuasive. Therefore, these rejections have been withdrawn.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to H. T. Le whose telephone number is 571-272-1511. The examiner can normally be reached on 10:00 a.m. to 6:30 p.m., Mondays to Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


H. T. Le
Primary Examiner
Art Unit 1773

April 29, 2006